



Food and Drug Administration 10903 New Hampshire Avenue Document Control Room –WO66-G609 Silver Spring, MD 20993-0002

Shantou Institute if Ultrasonic Instruments Co., Ltd. (SIUI)
% Mr. Bob Leiker
QRS Representative
Quality and Regulatory Services, Inc.
7263 Cronin Circle
DUBLIN CA 95648

Re: K101008

Trade/Device Name: Apogee 1100 Digital Color Doppler Ultrasound Imaging System

Regulation Number: 21 CFR 892.1550

Regulation Name: Ultrasonic pulsed doppler imaging system

Regulatory Class: II

Product Code: IYO, ITX, and IYN

Dated: April 6, 2010 Received: April 12, 2010

#### Dear Mr. Leiker:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

This determination of substantial equivalence applies to the following transducers intended for use with the Apogee 1100 Digital Color Doppler Ultrasound Imaging System, as described in your premarket notification:

#### Transducer Model Number

Convex Array C3L60C <u>Linear Array L8L38C</u> <u>Convex Array C5L40C</u> Phased Array P3F14C If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus permits your device to proceed to market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <a href="http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm">http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm</a> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

If you have any questions regarding the content of this letter, please contact Paul Hardy at (301) 796-6542.

Sincerely yours.

Donald St. Pierre Acting Director

Division of Radiological Devices Office of In Vitro Diagnostic Device

**Evaluation and Safety** 

Center for Devices and Radiological Health

Enclosure(s)

### **Indications for Use Statement**

510(k) Number (i	if known):
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#### Device Name:

Apogee 1100 Digital Color Doppler Ultrasound Imaging System with

Convex Array Transducer C3L60C

Linear Array Transducer L8L38C

Convex Array Transducer C5L40C

Phased Array Transducer P3F14C

#### Indications for Use:

Diagnostic ultrasonic imaging for abdominal, pediatric, small organ, musculo-skeletal, cardiac, peripheral vascular applications in B, M, PWD, Color Doppler and 3D imaging modes.

Prescription Use (Part 21 CFR 801 Subpart D)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD)

Division of Radiological Devices
Office of In Vitro Diagnostic Device Evaluation and Safety

510x K161008

## 3.1 System Indications for Use Form

System: Apogee 1100

Clinical Applic		İ	Mode of Operation									
General (Track 1 Only)		В	M	PWD	CWD	Color Doppler	Combined (Specify)	Other* (Specify)				
Ophthalmic	Ophthalmic						(-13)	(Specify)				
	Fetal	N	N		<del>                                     </del>		<del> </del>	N				
	Abdominal	N	N	N	<del>                                     </del>	N	<del> </del>	<del></del>				
	Intra-operative (Specify)				<b>-</b>		<del> ,</del>	N				
	Intra-operative (Neuro)				<del></del>	·	<del> </del>	<del> </del>				
	Laparoscopic						<del> </del>	<del> </del>				
Fetal	Pediatric	N	N	· N		N	<del> </del>	·				
Imaging & Other	Small Organ (Specify)	N	N	N	<del>                                     </del>	N	<del> </del>	<del> </del>				
& Other	Neonatal Cephalic		-	<del></del>	<u> </u>		<del> </del>					
	Adult Cephalic				<del></del>							
	Trans-rectal		<del>                                     </del>				<del> </del>					
	Trans-vaginal				<u> </u>		<del></del>					
i	Trans-urethral							·				
	Trans-esoph. (non-Card.)	1					<del></del>					
	Musculo-skeletal	N	N	N	<del></del>	N						
	(Conventional)			• •		IN	,					
	Musculo-skeletal (Superficial)	N	N	N ·		N						
	Intravascular				<del></del>			<del> </del>				
	Other (Specify)	N	N	N		N						
	Cardiac Adult	N	N	N	-	N		N				
Cardiac E	Cardiac Pediatric	N	N	N		N N						
[	Intravascular (Cardiac)					- 1						
· [	Trans-esoph. (Cardiac)					· <del>·</del>	<del></del>	<del></del>				
[	Intra-cardiac	1-1						<u> </u>				
	Other (Specify)	1	-  -	<del>  </del>	<del></del> +	·						
eripheral	Peripheral vessel	N	N	N	<del></del>	N		<u> </u>				
essel/	Other (Specify)	1		<del></del> +								

= new indication;		

Ŧ	( )ther	mod	lee of	onorati	an inal	٠ ا	1 1	Imaging:	
_	CHIOL	11100	ICS UI	<u>operati</u>	OH MIC	iuae: .	3-I <i>)</i>	ımagıno.	

Additional Comments: Other uses include: Prostate, Kidney, Uterus, Ovary Small organs include: Thyroid, Testes, Breast

Prescription Use (Per 21 CFR 801.109)

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Office of In Vitro Diagnostic Device Evaluation and Safety

TAB 3

Indications For Use

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3.2 Transducer Indications for Use Form

Transducer: Convex Array C3L60C

Clinical Applie	ation	Mode of Operation								
General (Track 1 Only)	Specific (Tracks 1 & 3)	В	M	PWD	CWD	Color Doppler	Combined (Specify)	Other* (Specify)		
Ophthalmic	Ophthalmic									
	Fetal	N	N							
	Abdominal	N	N	N		N				
	Intra-operative (Specify)					* -	<del></del> ."	1		
	Intra-operative (Neuro)									
	Laparoscopic							<u> </u>		
Fetal	Pediatric									
Imaging	Small Organ (Specify)				<u> </u>					
& Other	Neonatal Cephalic					<del></del>	<del>-   </del>			
	Adult Cephalic				_					
	Trans-rectal			<u> </u>				<del>-</del>		
	Trans-vaginal							<u> </u>		
	Trans-urethral				<del> </del>		<del>                                     </del>	<del>                                     </del>		
	Trans-esoph. (non-Card.)					<del> </del>		<u> </u>		
	Musculo-skeletal									
	(Conventional)  Musculo-skeletal (Superficial)		-							
3	Intravascular				:	-	<u> </u>	<del> </del>		
	Other (Specify)	N	N	N		N		<del> </del>		
	Cardiac Adult						1			
Cardiac	Cardiac Pediatric		_		<del></del>		<del>-</del>			
	Intravascular (Cardiac)				<del> </del>			,		
	Trans-esoph. (Cardiac)							<u> </u>		
	Intra-cardiac							<del> </del>		
	Other (Specify)							· · · · · · · ·		
Peripheral	Peripheral vessel					,				
Vessel	Other (Specify)				1					

N = new indication; P = previously cleared by FDA; E = added under this appendix Additional Comments: Other uses include: Prostate, Kidney, Uterus, Ovary

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3.3 Transducer Indications for Use Form

Transducer: Linear Array L8L38C

Clinical Applic	ation	Mode of Operation								
General (Track 1 Only)	Specific (Tracks 1 & 3)	В	M	PWD	CWD	Color Doppler	Combined (Specify)	Other* (Specify)		
Ophthalmic	Ophthalmic							(-1		
	Fetal									
	Abdominal							<del> </del>		
	Intra-operative (Specify)							1.		
	Intra-operative (Neuro)									
	Laparoscopic							<del> </del>		
Fetal	Pediatric	N	N	N		N	1			
Imaging	Small Organ (Specify)	N	N	N		N				
& Other	Neonatal Cephalic						<del> </del>			
	Adult Cephalic									
	Trans-rectal	<u> </u>		<del></del>	<del> </del>					
	Trans-vaginal	_			<del>                                       </del>		<del>                                     </del>			
	Trans-urethral	_					<del> </del>			
•	Trans-esoph. (non-Card.)	1	i H	····						
	Musculo-skeletal (Conventional)	N	N	N		N				
	Musculo-skeletal (Superficial)	N	N	N		N				
`	Intravascular			-		,				
	Other (Specify)									
	Cardiac Adult									
Cardiac	Cardiac Pediatric					·				
[	Intravascular (Cardiac)		-				· · · · · · · · · · · · · · · · · · ·	<u> </u>		
	Trans-esoph. (Cardiac)			<del>,</del>						
· [	Intra-cardiac							<del></del> -		
	Other (Specify)			,				<del></del>		
Peripheral	Peripheral vessel	N	N	'N		· N				
Vessel	Other (Specify)	_	<del> </del>				<u> </u>			

N = new indication; P = previously cleared by FDA; E = added under this appendix
Additional Comments: Small organs include: Thyroid, Testes, Breast

Prescription Use (Per 21 CFR 801.109)

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3.4 Transducer Indications for Use Form Transducer: Convex Array C5L40C

Clinical Applic			Mode of Operation								
General (Track 1 Only)	Specific (Tracks 1 & 3)	В	M	PWD	CWD	Color Doppler	Combined (Specify)	Other* (Specify)			
Ophthalmic	Ophthalmic							(Specify)			
	Fetal		N					N			
	Abdominal		N				<del> </del>	N			
	Intra-operative (Specify)					<del></del>	<del> </del>	1			
	Intra-operative (Neuro)		j –				<del> </del>	<del> </del>			
	Laparoscopic						<del>                                     </del>	<del> </del>			
Fetal	Pediatric					<del> </del>					
Imaging	Small Organ (Specify)							<del> </del>			
& Other	Neonatal Cephalic				ļ	<del></del>		<del> </del>			
	Adult Cephalic				<del></del>		<del> </del>	<del> </del>			
	Trans-rectal	_					<del> </del>	<del> </del>			
	Trans-vaginal	_			<u> </u>			<del> </del>			
	Trans-urethral						<u> </u>	ļ <del></del>			
	Trans-esoph. (non-Card.)							<u> </u>			
	Musculo-skeletal (Conventional)		-			•					
	Musculo-skeletal (Superficial)	1									
	Intravascular		一†					······································			
- 	Other (Specify)		N					N			
	Cardiac Adult				<u> </u>		· ·				
Cardiac	Cardiac Pediatric	1	$\neg$				<del></del>	<u></u>			
. [	Intravascular (Cardiac)	7 7						· · · · · · · · · · · · · · · · · · ·			
[	Trans-esoph. (Cardiac)										
· [	Intra-cardiac										
	Other (Specify)	1									
Peripheral	Peripheral vessel										
	Other (Specify)					<del></del>					

N = new	<u>indic</u>	ation	; P	= previou	isly cleare	d by FDA;	E = added	under this	annendix
* ~									<u>wppoituix</u>

\* Other modes include: 3-D Imaging: Additional Comments: Other uses include: Prostate, Kidney, Uterus, Ovary

Prescription Use (Per 21 CFR 801.109)

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3.5 Transducer Indications for Use Form Transducer: Phased Array P3F14C

Clinical Application		Mode of Operation								
General (Track 1 Only)	Specific (Tracks 1 & 3)	В	M	PWD	CWD	Color Doppler	Combined (Specify)	Other* (Specify)		
Ophthalmic	Ophthalmic							(.1,,)		
	Fetal									
	Abdominal				<del> </del>		<del></del>	<del> </del>		
	Intra-operative (Specify)				T	<u> </u>				
	Intra-operative (Neuro)									
	Laparoscopic							<del></del>		
Fetal	Pediatric							<del>                                     </del>		
Imaging	Small Organ (Specify)	1				-				
& Other	Neonatal Cephalic				<u> </u>			<del>                                     </del>		
	Adult Cephalic					<del> </del>	<del>  .                                   </del>	<del>                                     </del>		
	Trans-rectal				<del></del>	<del> </del>		<del> </del>		
	Trans-vaginal		<del> </del>		<del> </del>	··-		<del>                                     </del>		
	Trans-urethral				<del> </del>	<del> </del>		<u> </u>		
	Trans-esoph. (non-Card.)		1					<del> </del>		
	Musculo-skeletal		ļ —				<del> </del>	<del> </del>		
	(Conventional)					•				
	Musculo-skeletal (Superficial)							<del>                                     </del>		
	Intravascular		_		<del>                                     </del>		<del> </del>	_		
	Other (Specify)	<del>.  </del>			<del></del>	<u> </u>		<del> </del> -		
	Cardiac Adult	N	N.	N		N				
Cardiac	Cardiac Pediatric	N	N	N	· · ·	N				
	Intravascular (Cardiac)	1								
·	Trans-esoph. (Cardiac)				<u> </u>	,				
	Intra-cardiac						<u> </u>			
<u> </u>	Other (Specify)			-		<u> </u>				
Peripheral	Peripheral vessel				***					
Vessel	Other (Specify)				· · ·		<del></del>	<del> </del>		

N = new indication; P = previously cleared by FDA; E = added under this appendix

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